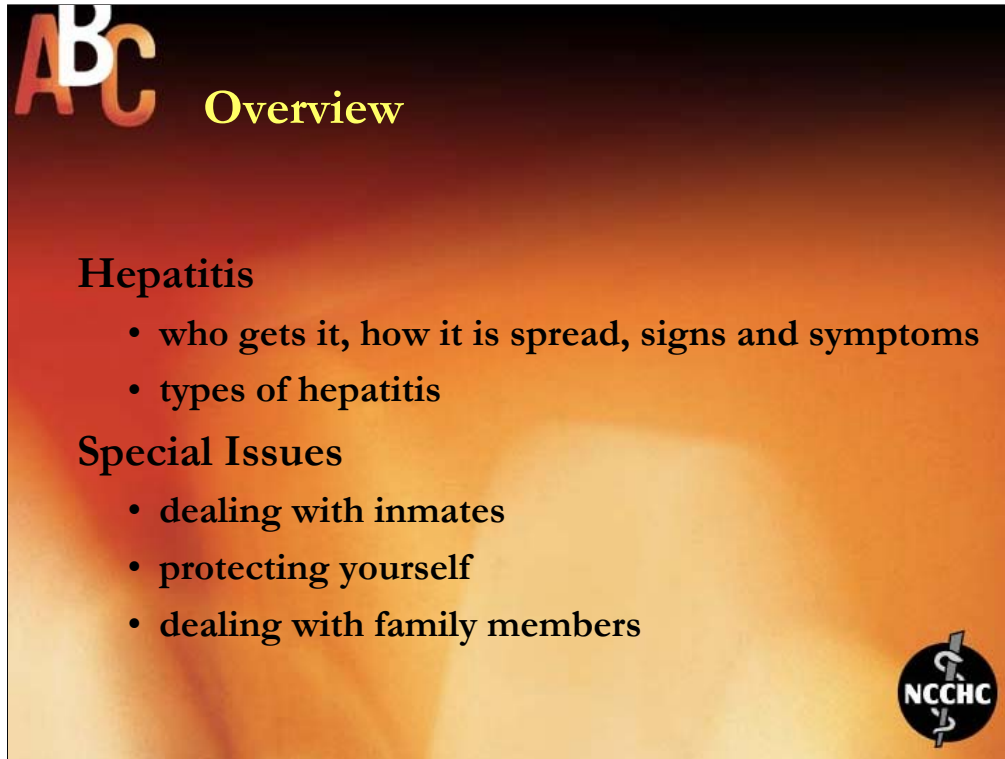


0:00 Introduction

Introduce yourself and set a positive tone for the learning experience.

Distribute the handouts for the presentation (see Tab 4 Resources).

*In this lecture, **bolded** words may need further explanation to the inmate audience. Remember, an NCCHC study has shown that inmates generally read at a 6th grade reading level. Make sure the audience understands the term before you proceed.*



0:01 Overview

- This presentation on viral hepatitis is divided into two parts. During the first part:

We will discuss the three types of viral hepatitis (A, B and C).

We will discuss what it actually is, who gets it and how it is spread, the signs and symptoms that tell you if you have it and the treatment for the specific type of hepatitis

- During the second part

We will discuss issues that are of direct concern to you, the inmate.

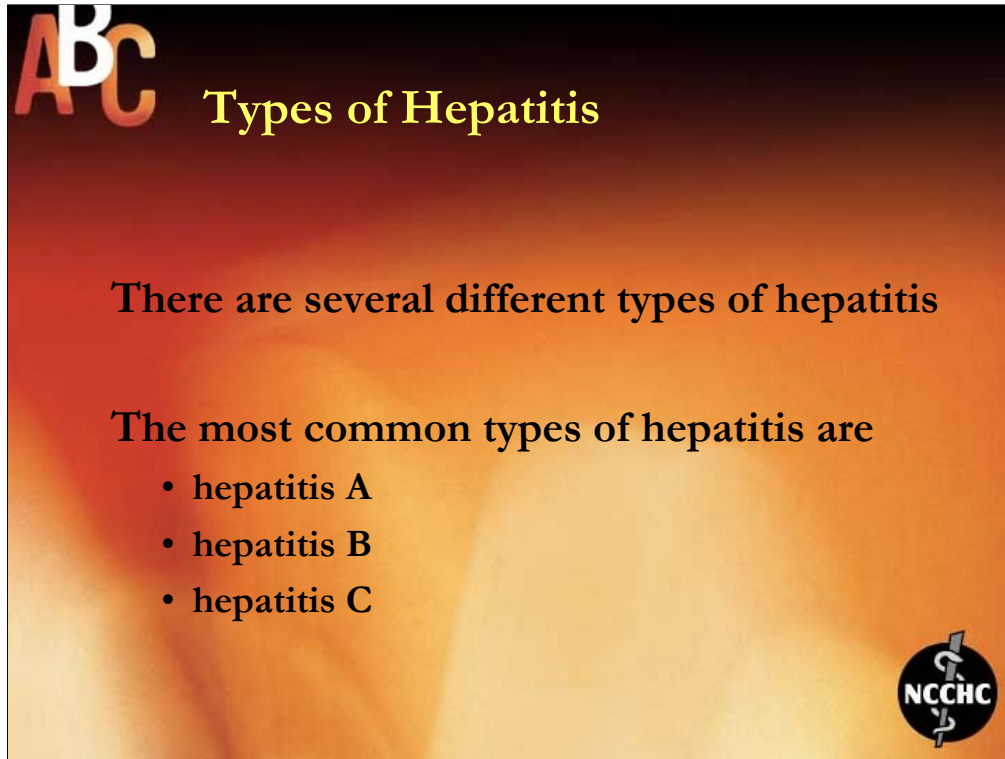
We will focus on dealing with other inmates and protecting yourself against viral hepatitis.



- The audience handout will help you follow the presentation.
- There will be a discussion period after each part is presented for questions.
- You've already taken the test to show how much you know about hepatitis now.
- Afterwards, I will be giving you another test to see if you learned anything new from the **presentation**.

ANY QUESTIONS?

Q. How long is this presentation going to take?
Approximately an hour and a half.



0:04 Types of hepatitis

- The story of viral hepatitis is interesting. There are many types, the most common being hepatitis A, B, and C. Each is caused by a virus.
- We begin with a discussion of viruses and the liver.
- What is a virus?

A virus is a **contagious agent** found in basically all life forms, including humans, animals, plants, **fungi**, and bacteria.

Viruses are extremely small, between 20 and 100 times smaller than bacteria, and cannot be seen under a microscope.

Viruses cannot **reproduce** outside of a living cell.



- What does the liver do?

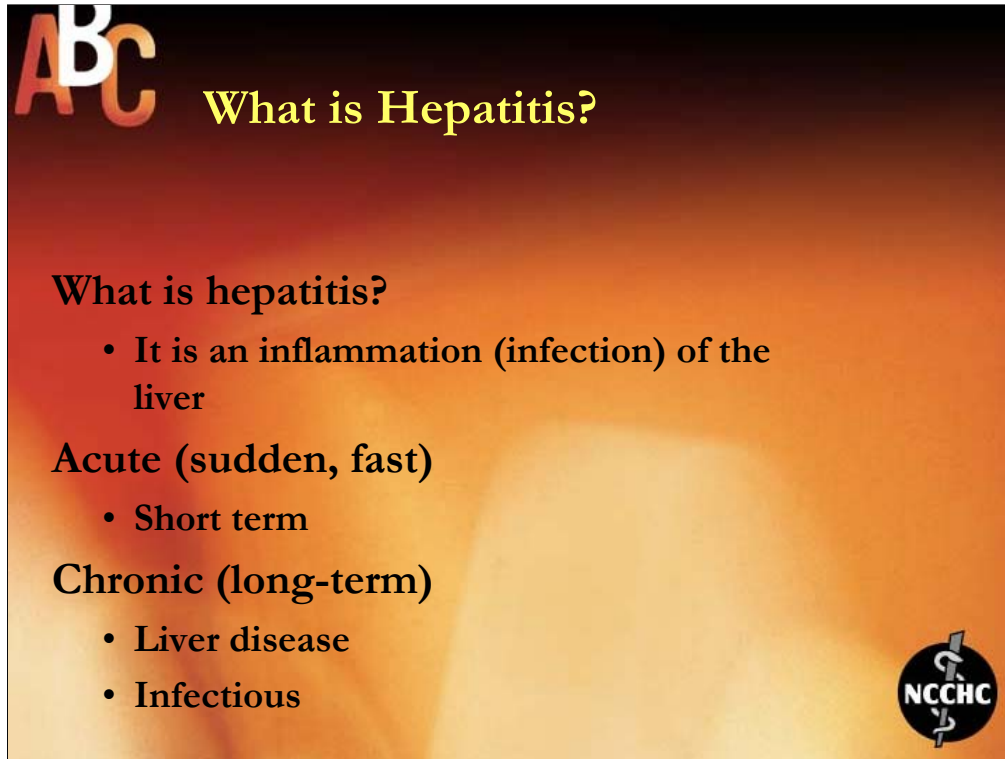
The liver is an organ that helps your body **digest** food and acts as a **filter** for poisons or anything **toxic** in the body.

- Where is the liver?

The liver is located in the right upper **quadrant** of the **abdomen**.

- This is a normal liver. It is dark reddish-brown in color with a **fine lobular texture**.

- Notice the **smooth capsular** (compartment) surface at the left.



0:05 What is hepatitis?

• During the **acute (sudden or fast)** phase of **hepatitis** (an inflammation of the liver), the person begins to feel ill if symptoms and signs are present.

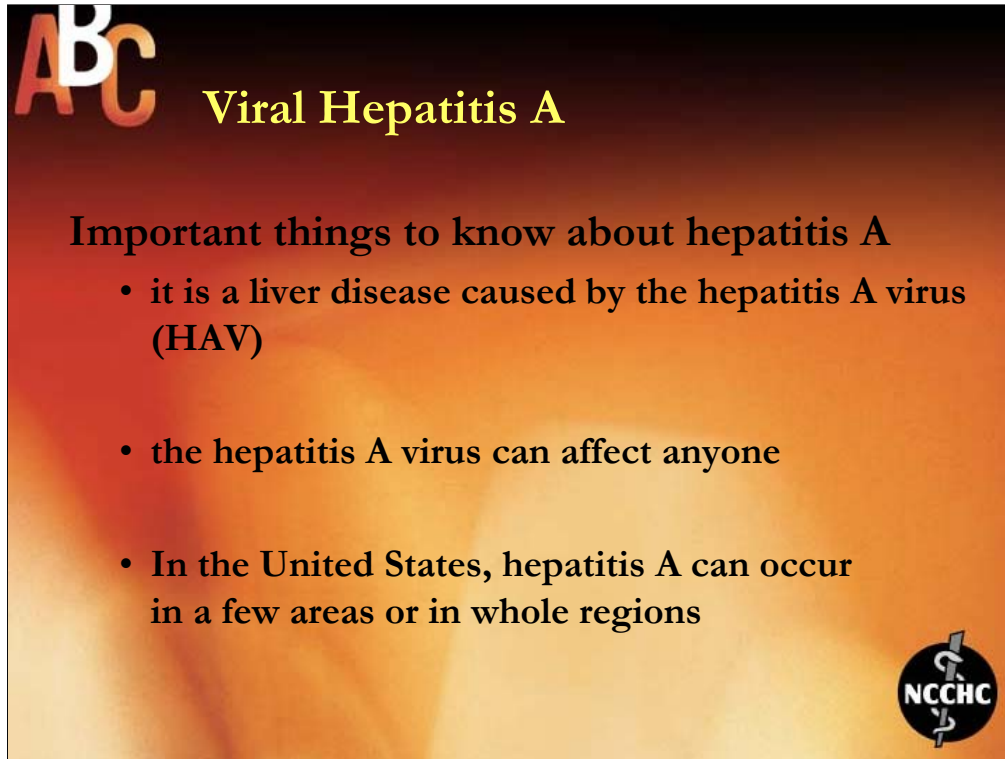
However, remember that many times a person does not even know that they have hepatitis.

Sometimes, a person feels like they have a cold or flu-like symptoms and signs such as tiredness and muscle aches.

• **Chronic** is a long-term phase of the disease that affects the liver and is **infectious** (passed on) to others.



- Sometimes the person has jaundice. **Jaundice** is a yellow color of the skin and whites of the eyes that usually lasts 2-5 weeks.
- The majority of people with hepatitis never have jaundice.
- Dark urine or clay-colored stools (light sand color) sometimes occur 1 to 5 days before the beginning of jaundice.
- Persons with hepatitis may also have a fever.
- As I mentioned, there are many types of hepatitis, the most common being hepatitis A, B, and C.
- Let's begin with hepatitis A.



0:06 viral hepatitis A

- Viral hepatitis A is a liver disease caused by the hepatitis A virus (HAV).

Viral hepatitis A can affect anyone.

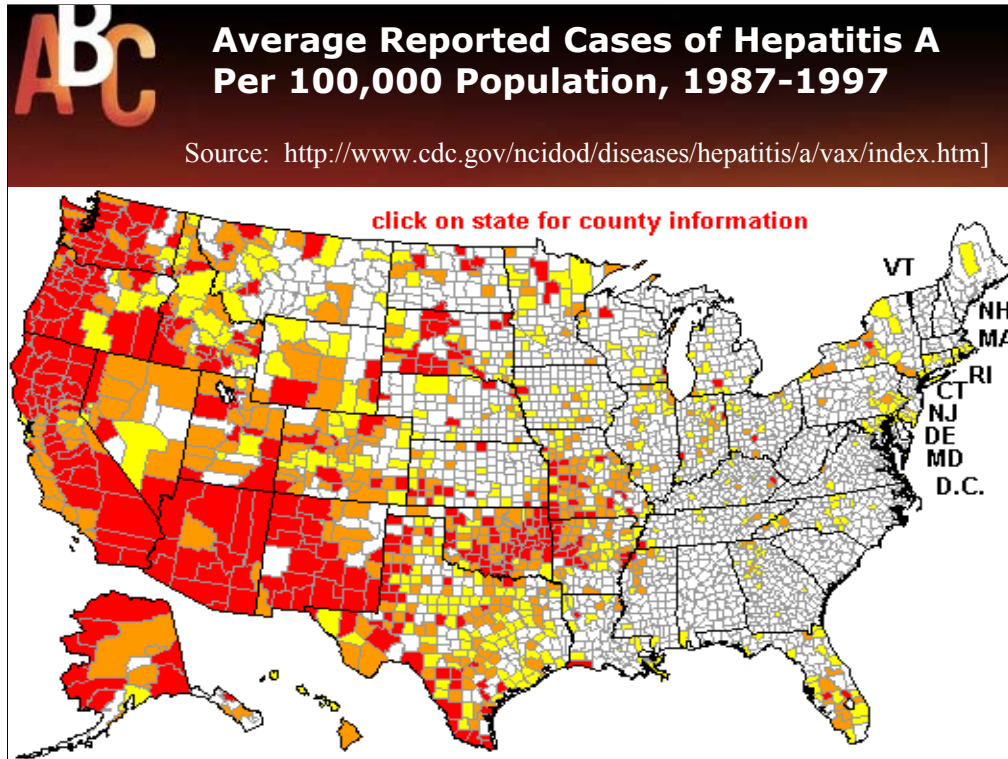
In the United States, viral hepatitis A can occur in situations ranging from **isolated** cases of disease to **widespread epidemics**.

Occurs in epidemics both nationwide and in **clusters**.

- During epidemic years, the number of reported cases reached 35,000.
- In the late 1990s viral hepatitis A vaccination was more widely used and the number of cases reached historic lows.



- One-third of Americans have evidence of past HAV infection.
- Although viral hepatitis A occurs in virtually every area of the United States, certain states and counties have higher rates than others.



0:09 Prevalence

Here in _____ the **prevalence** rate for
(your county)
hepatitis A is: _____

*[NOTE: To determine YOUR county and state rates go to
<http://www.cdc.gov/ncidod/diseases/hepatitis/a/vax/index.htm>]*



How Do You Get Hepatitis A?

Hepatitis A virus is

- in the “poop” of persons infected with hepatitis A

Hepatitis A virus is usually spread

- Putting something in your mouth (food, water, hands) that has touched the “shit” of a person with hepatitis A
- Most infections come from someone with hepatitis A that you live with or have sex with



0:10 How do you get hepatitis A?

- You get hepatitis A through close person to person contact.
- Generally, by eating food or drinking water (even though it may look clean) that has been **contaminated** with the stool or "poop" of a person with hepatitis A.
- Placing contaminated hands in your mouth can also **spread** hepatitis A.



- Most infections come from contact with a **household** member or someone you have sex with who has hepatitis A.
- Casual contact, such as in an office, does not spread the virus.
- For example, just touching an inmate does not spread hepatitis A.



Signs and Symptoms of Hepatitis A

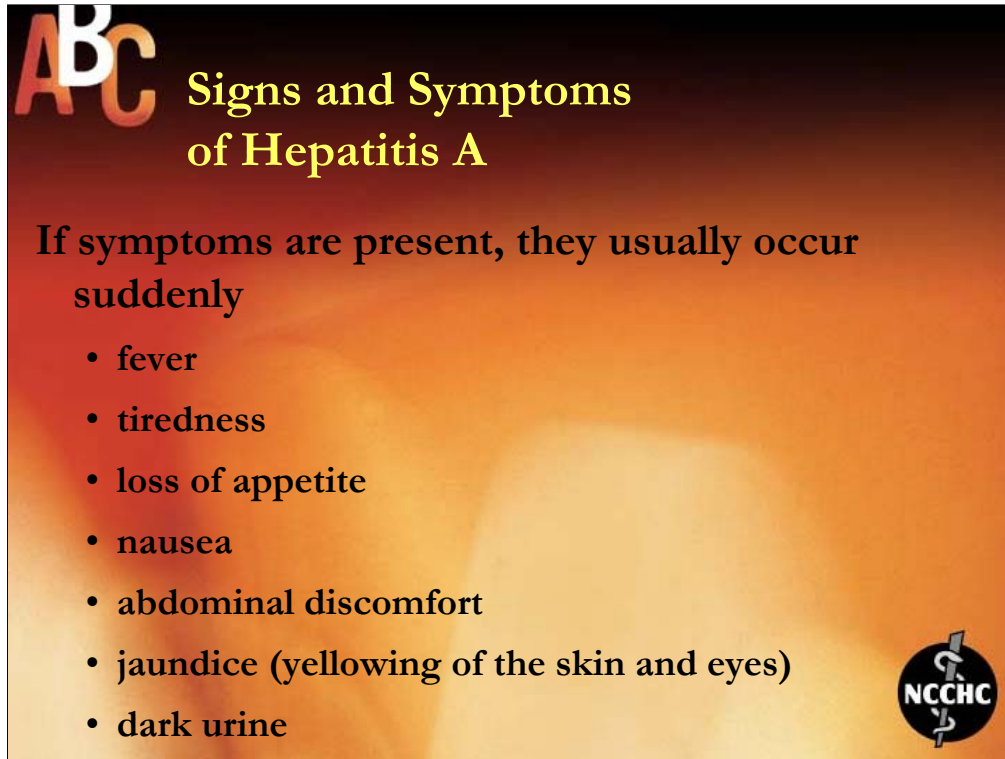
Hepatitis A virus affects people differently

- Some people have no physical complaints when they are infected with the hepatitis A virus
- Older persons are more likely to have symptoms than children



0:12 Signs and Symptoms of hepatitis A

- Persons with hepatitis A virus infection may not have any signs or symptoms of the disease.
- Older persons are more likely to have symptoms than children.



0:13 Signs and Symptoms of hepatitis A

- If symptoms are present, they usually occur abruptly and may include
 - fever (the most reported symptom)
 - tiredness,
 - loss of appetite,
 - nausea**,
 - vomiting,
 - abdominal discomfort,
 - jaundice** (yellowing of the skin and eyes), and
 - dark urine.



Getting Hepatitis A

How long does it take to get hepatitis A after being exposed to someone who has hepatitis A?

- The average incubation period for hepatitis A is 28 days (range: 15–50 days)

How long does it last?

- Symptoms usually last less than 2 months
- Some persons are ill for as long as 6 months



0:15 Getting hepatitis A

The average **incubation** period (that is, when you are first exposed to the time you get sick) for hepatitis A is 28 days (**range**: 15 to 50 days).

Symptoms usually last less than 2 months.

A few persons are ill for as long as 6 months.



Persons at Risk

Who is more at risk of getting hepatitis A?

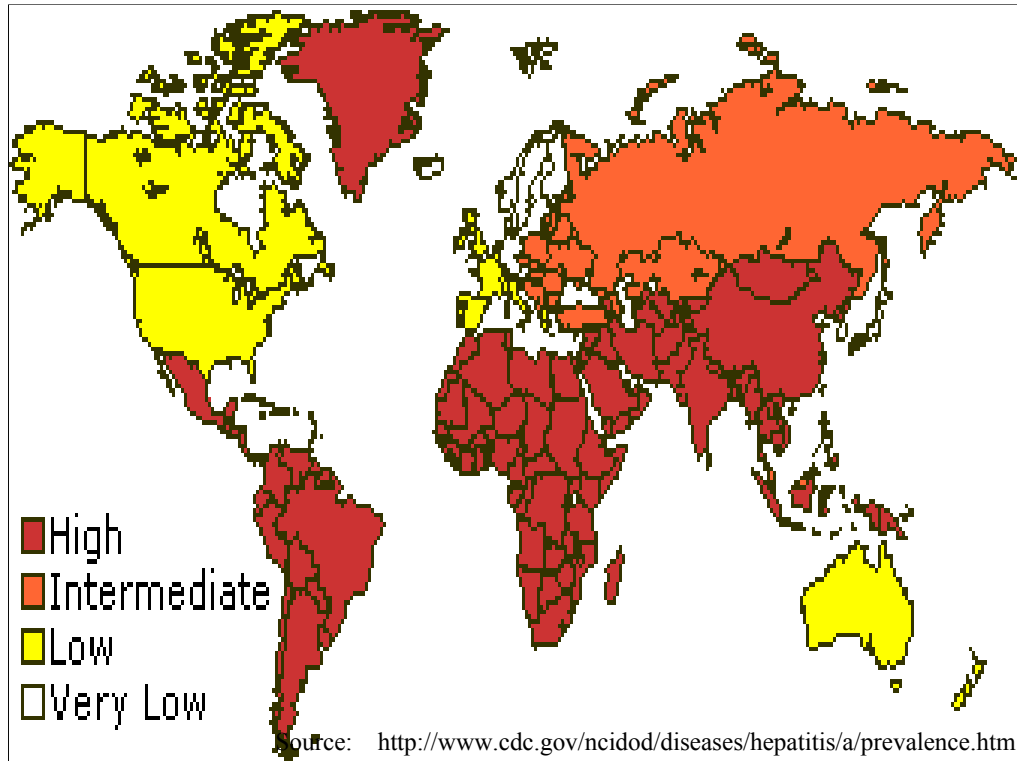
- People living with HAV-infected persons
- Sex contacts of infected persons
- Persons, especially children, living in regions of the U.S. with increased rates of hepatitis A
- Men who have sex with men
- Injecting and non-injecting drug users
- Persons traveling to countries where hepatitis A is present



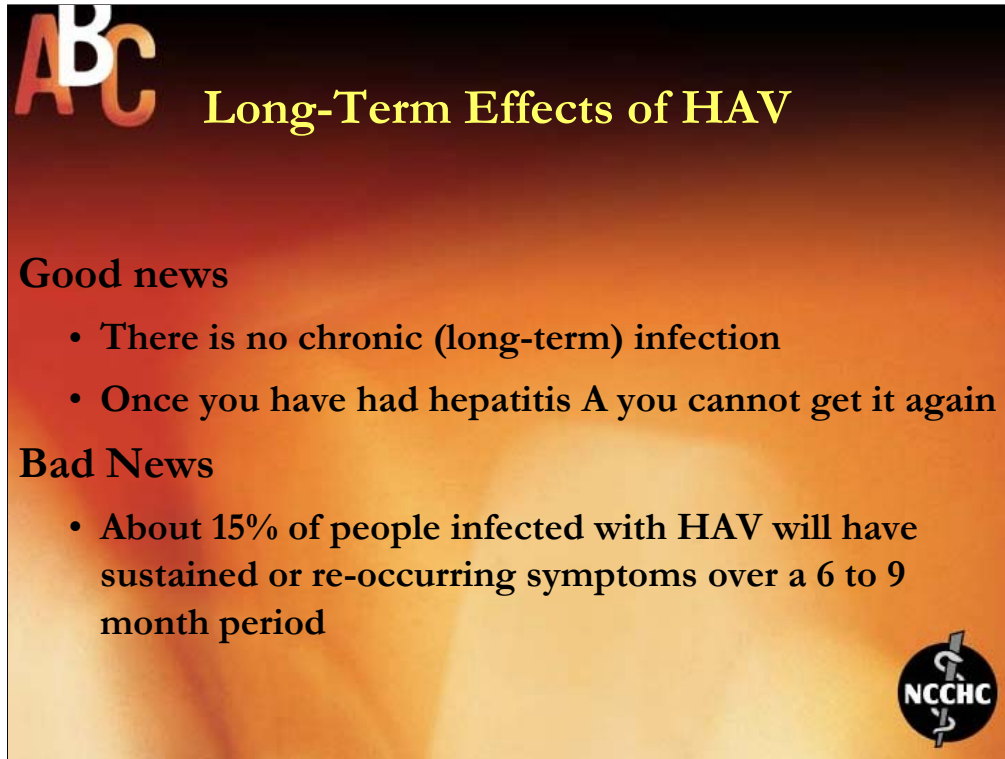
0:16 Persons at Risk

Who is more at risk for getting hepatitis A?

- Household contacts of infected persons
- Sex contacts of infected persons
- Persons, especially children, living in regions of the U.S. with **consistently increased** rates of hepatitis A (see slide 8)
- Men who have sex with men
- Injecting and non-injecting drug users, and . . .



Persons traveling to countries where hepatitis A is common (e.g., Africa or South America).




ABC Long-Term Effects of HAV

Good news

- There is no chronic (long-term) infection
- Once you have had hepatitis A you cannot get it again

Bad News

- About 15% of people infected with HAV will have sustained or re-occurring symptoms over a 6 to 9 month period

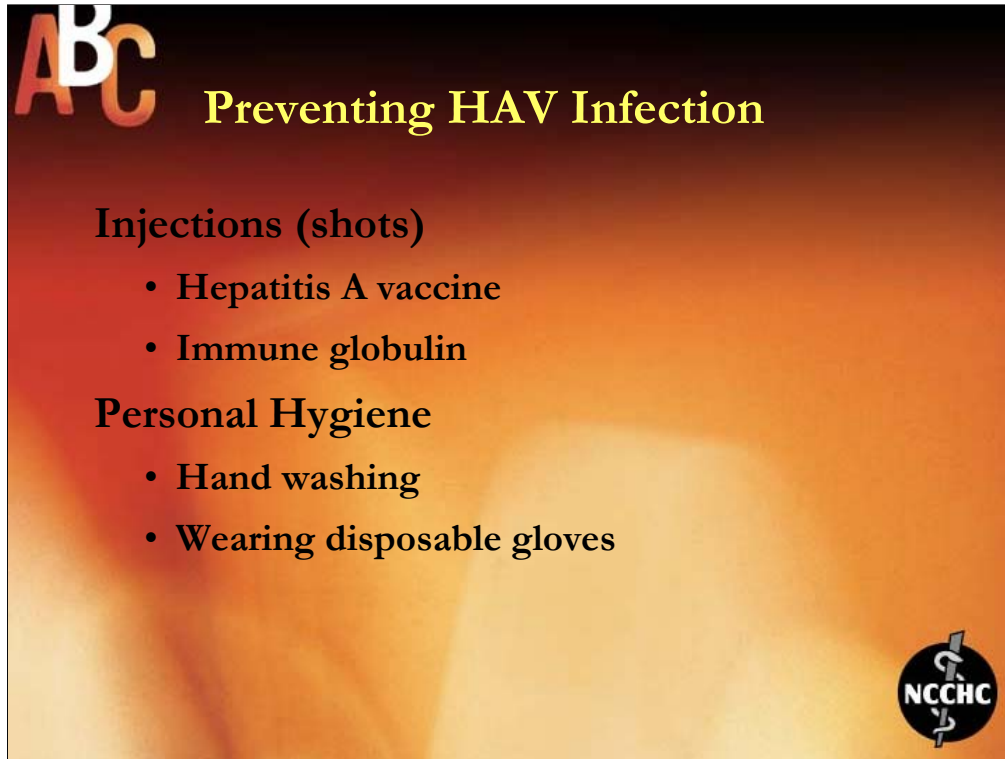


0:18 Long-Term Effects of HAV

There is no chronic (long-term) infection.

Once you have had hepatitis A you cannot get it again.

However, a small **percentage** of HAV-infected people (about 15%) will have **prolonged** or **relapsing** symptoms over a 6 to 9 month period.



0:19 Preventing HAV Infection

There are two things that you can do to prevent hepatitis A virus infection.

- The first and best protection is vaccination.
- Short-term protection against hepatitis A is available from **immune globulin**.
- It can be given before and within 2 weeks after coming in **contact** with HAV.



Vaccination for Hepatitis A

If Exposed to the Hepatitis A Virus

- A short-term immunoglobulin is given within 2 Weeks

If Not Exposed to the Hepatitis A Virus

- Long-term vaccine lasts approximately 20 years
- Two injections over 6 to 12 months
- Must get second injection for long-term effect

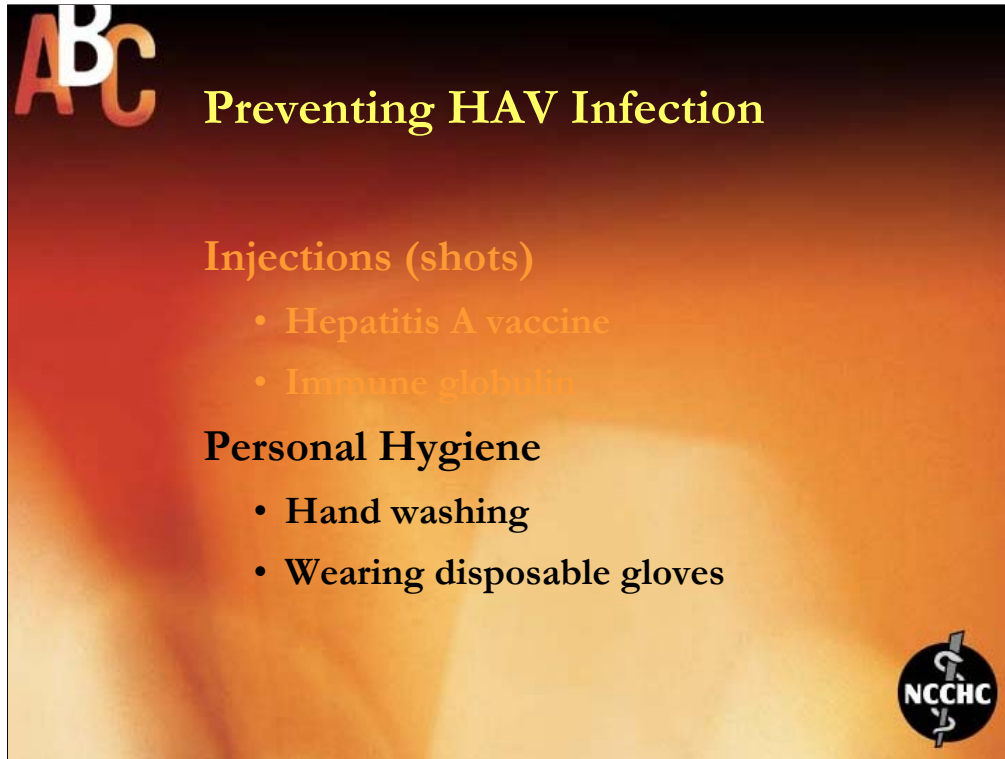


If **exposed** to the hepatitis A virus, a short-term immunoglobulin shot is given within 2 weeks.

If not exposed to the hepatitis A virus, a long-term vaccine lasts approximately 20 years.

This **vaccination** consists of two shots over 6 to 12 months.

The second shot must be given for long-term effect to take place.



The second way to protect yourself against the hepatitis A virus is to make sure that you always practice good personal cleanliness and proper **sanitation**.

- Wash your hands with soap and water after using the bathroom, changing a diaper, and before preparing and eating food.
- Wear gloves when handling soiled inmate linen.
- Practice **standard precautions**.



Summary of Hepatitis A

Remember

- the HAV is spread through contaminated food or water
- Symptoms are various complaints
- There is no long-term infection and you cannot get it again
- Best way to protect against HAV is vaccination and hand washing

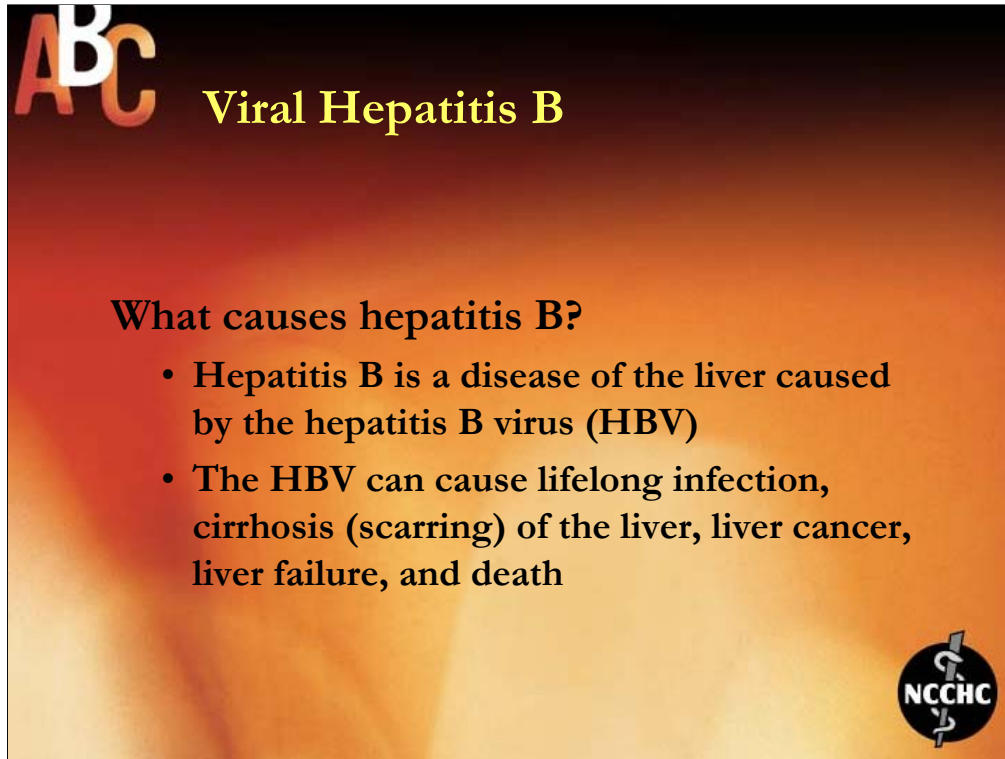


0:20 Summary of hepatitis A

To summarize

- You get hepatitis A by eating food or drinking water that has been contaminated with the **feces** of a person with hepatitis A.
- Symptoms are usually quick and may include fever, tiredness, loss of appetite, nausea, vomiting, abdominal discomfort, jaundice (yellowing of the skin and eyes), and dark urine.
- There are no long-term affects of HAV.
- Vaccination is best way to protect.
- Hand washing is also important.

Any Questions?

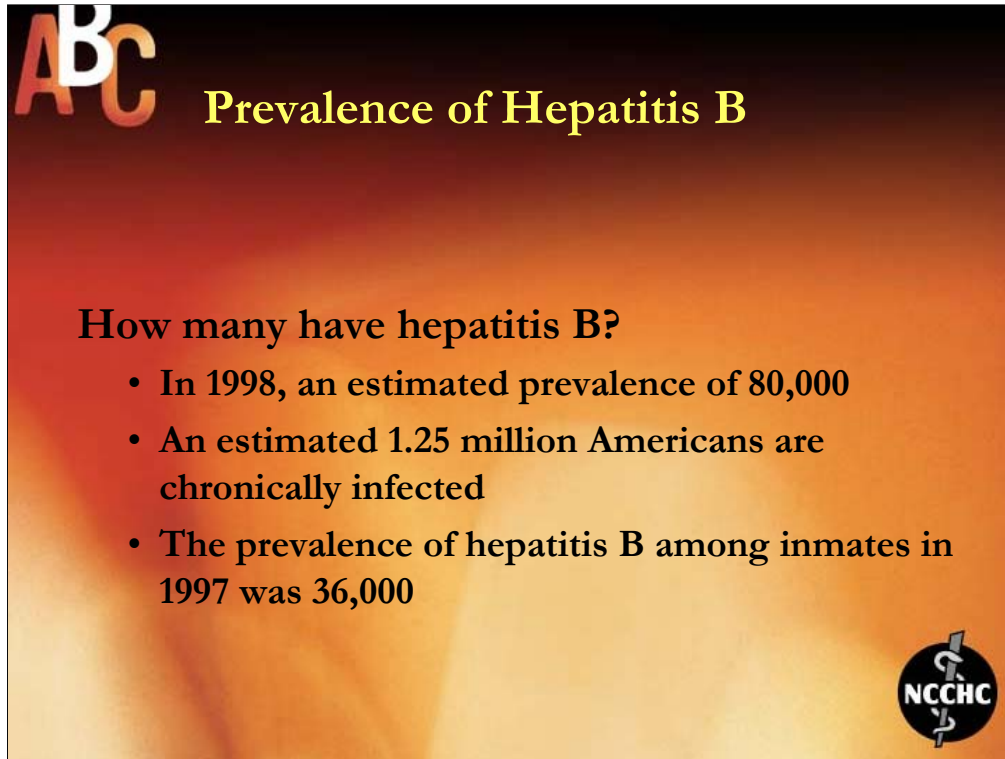


0:21 hepatitis B

Hepatitis B is a disease caused by a virus that attacks the liver.

The virus, which is called hepatitis B virus (HBV), can cause

- lifelong infection,
- cirrhosis** (scarring) of the liver,
- liver cancer,
- liver failure, and
- death.



The number of new infections each year has declined from an average of 450,000 in the 1980s to about 80,000 in 1998.

Highest rate of disease occurs in 20 to 49 year olds.

The greatest decline has happened among children and adolescents due to routine hepatitis B vaccination.

The Centers for Disease Control and Prevention (CDC) estimates that 1.25 million Americans are chronically infected, with 20 to 30% of them **acquiring** their infection during childhood.

The National Commission on Correctional Health Care estimates that the **prevalence** of hepatitis B among inmates in 1997 was 36,000.



Who Is at Risk?

Who can get it?

- Hepatitis B can affect any non-immunized person
- Persons with multiple sex partners or diagnosis of a sexually transmitted disease
- Men who have sex with men
- Sex contacts of infected persons
- Injection drug users



0:23 Who Is at Risk?

Hepatitis B can affect anyone who is not immunized against the hepatitis B virus.

Persons with multiple sex partners or diagnosis of a sexually transmitted disease.

Men who have sex with men.

Sex contacts of infected persons.

Injection drug users.



Risks to Hepatitis B

Who is at risk?

- Household contacts of chronically infected persons
- Infants born to infected mothers
- Infants/children of immigrants from areas with high rates of HBV infection
- Health care and public safety workers
- Hemodialysis patients



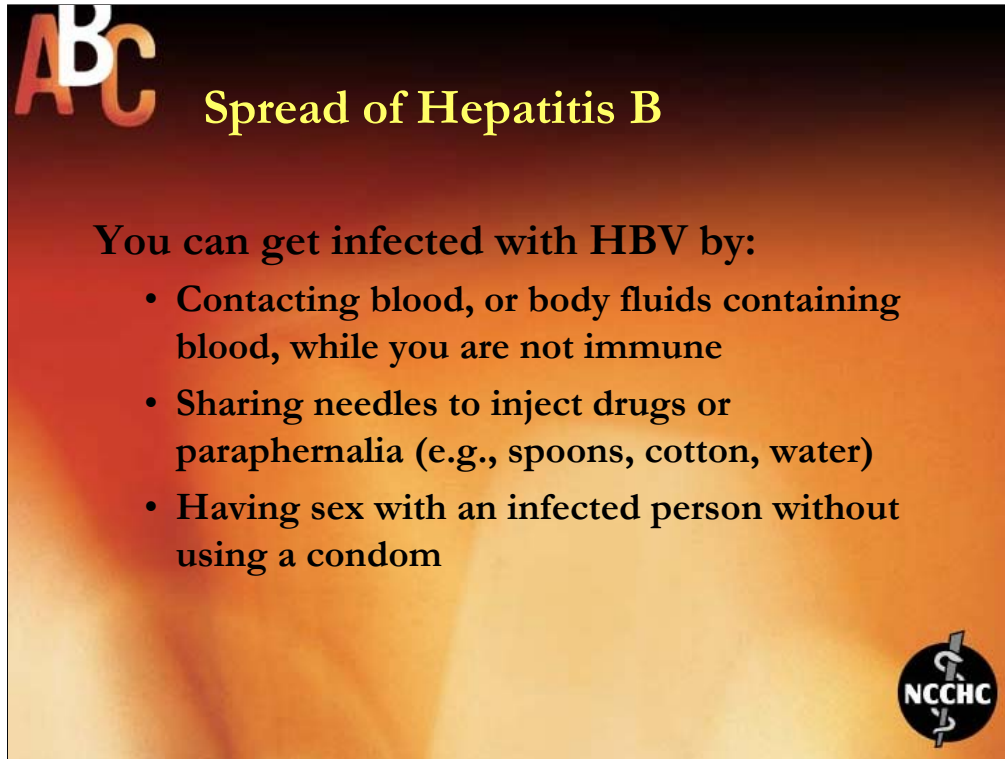
Household contact of chronically infected persons.

Infants born to infected mothers.

Infants/children of **immigrants** from areas with high rates of HBV infection.

Health care and **public safety** workers.

Hemodialysis patients.



0:25 Spread of hepatitis B

An HBV infection occurs when blood or body fluids from an infected person enters the body of a person who is not **immune**.

This does not include sweat, tears, and fluids that are absent of or free from blood.

There are a number of ways that you can get infected with the hepatitis B virus.

- Sharing needles or "works" when "shooting" drugs, or through needle sticks from contaminated sharps.
- Have sex with an infected person without using a condom.

The **efficacy** (safety and effectiveness) of **latex** condoms in **preventing** infection with HBV is unknown, but their **proper** use may **reduce transmission**.

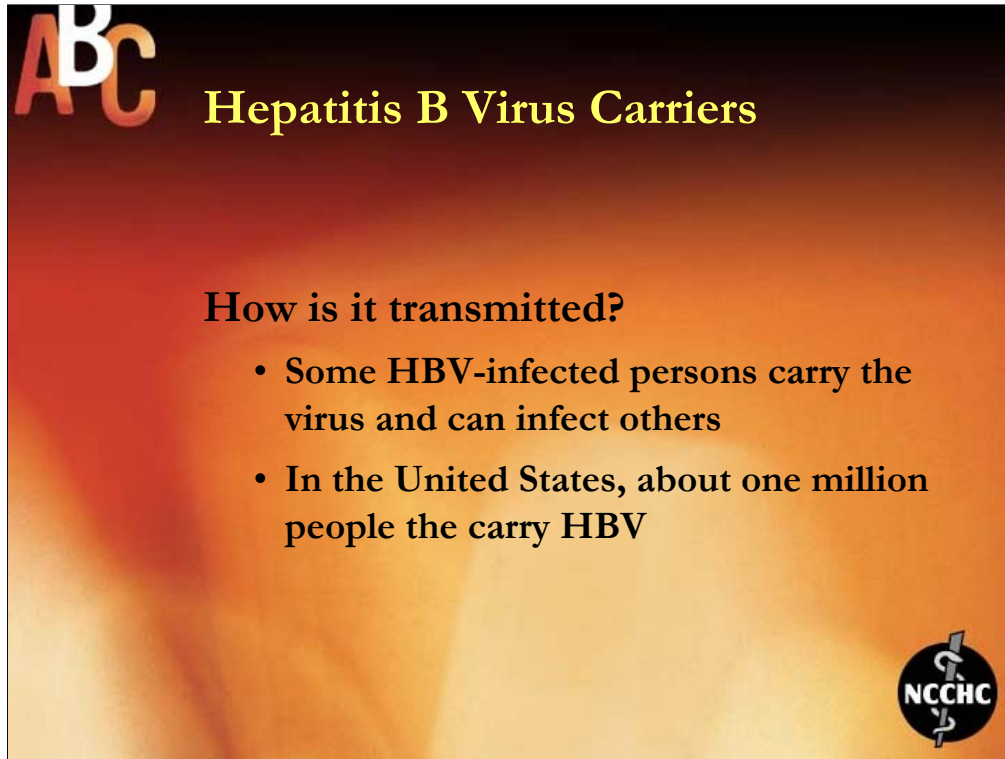


HBV is not spread through food or water or by casual contact.

Often, people do not know that they are infected with the HBV.

Certain behaviors make the chances much higher that a person will develop hepatitis B.

- have sex with someone infected with HBV
- have sex with more than one partner
- are a man and have sex with a man



0:28 Hepatitis B Virus Carriers

Most people recover, but sometimes, people who are infected with HBV never recover fully from the infection; they carry the virus and can infect others for the rest of their lives.

"Carriers" will probably carry the hepatitis B virus in their blood for the rest of their lives, which means it is chronic.

They may not look or feel sick, but they can spread the disease to other people.

In the United States, about 1.25 million people carry HBV.



Symptoms of Viral Hepatitis B

If you have the hepatitis B virus you may

- have eyes or skin turn yellow
- lose your appetite
- have nausea, vomiting, fever, stomach or joint pain
- feel extremely tired and not be able to work for weeks or months



0:30 Symptoms of Viral Hepatitis B

The symptoms of hepatitis B can include:

- yellow skin or eyes,
- loss of appetite and tiredness,
- nausea, diarrhea, or vomiting,
- pains in muscles, joints or stomach, and
- fatigue lasting weeks or months.

The average **incubation** period (that is, when you are first exposed to the time you get sick) for hepatitis B is 120 days.



0:31 Hepatitis B

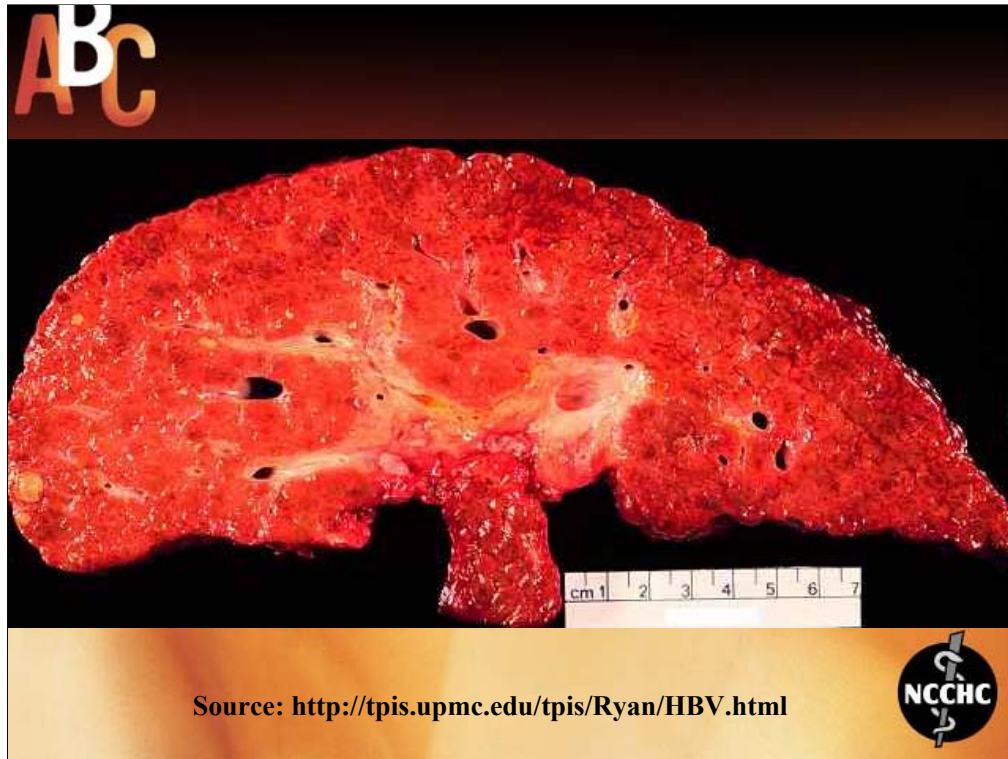
Hepatitis B is a serious disease. People with hepatitis B get serious health problems, such as cirrhosis (scarring of the liver) or liver cancer. In fact, the hepatitis B virus causes most of the liver cancer in the world.

This photo is of a Cambodian refugee woman who had hepatitis B and liver cancer.

She died 4 months after she arrived in the camp.

Average life expectancy after diagnosis of liver cancer is 4 months.

[Photo courtesy of Patricia Walker, MD, Health Partners, St. Paul, MN]




In hepatitis B, the liver cells become enlarged, notice the **blistering** of the **capsular** surface.

Putting a person with hepatitis in a separate, isolated room during their illness is not necessary unless the person has **complications** of hepatitis, such as bleeding problems. This is the reason why inmates with hepatitis will not be placed in the infirmary or isolated.

Use a common sense approach to dealing with other inmates. Care should be taken to limit contact with the person's blood and body fluids.

[Photo courtesy of Anthony Demetris, MD, University of Pittsburgh Medical Center, Pittsburgh, PA]




Cure and Prevention of Hepatitis B

Is there a “cure”?

- There is no “cure” for chronic hepatitis B
- Prevention and changing behavior is so important

Hepatitis B vaccine is the best protection against HBV

- Three doses are needed for complete protection



0:33 Cure and Prevention

There is no specific cure for chronic hepatitis B once you get it.

So it is best to prevent getting hepatitis B in the first place.

Prevention and changing behavior are the keys to staying healthy.

A hepatitis B vaccine is the best protection against the HBV. Three doses are needed for complete protection.



Hepatitis B Vaccination

Who should get vaccinated?

- All babies, at birth
- All children 0-18 years of age who have not been vaccinated
- Persons of any age whose behavior puts them at high risk for HBV infection
- Persons whose jobs expose them to human blood



0:34 Hepatitis B Vaccination

All babies, at birth.

All children 0-18 years of age who have not been vaccinated.

Persons of any age whose behavior puts them at high risk for HBV infection.

Persons whose jobs expose them to human blood.

A person can catch hepatitis B by having sex, sharing drug needles, or sharing personal items, like razors or toothbrushes, with someone who has the disease. So why do we immunize infants when they don't do any of these things?

Most importantly, if a mother has hepatitis B, she can pass the disease along to her child while giving birth.

If these babies are not immunized and become infected with the hepatitis B virus, many of them will become carriers.

One out of 4 of these infected babies will eventually die from cirrhosis or liver cancer.

Health experts have also found that if we wait to immunize people until they are having sex or sharing drug needles, many will not get immunized.

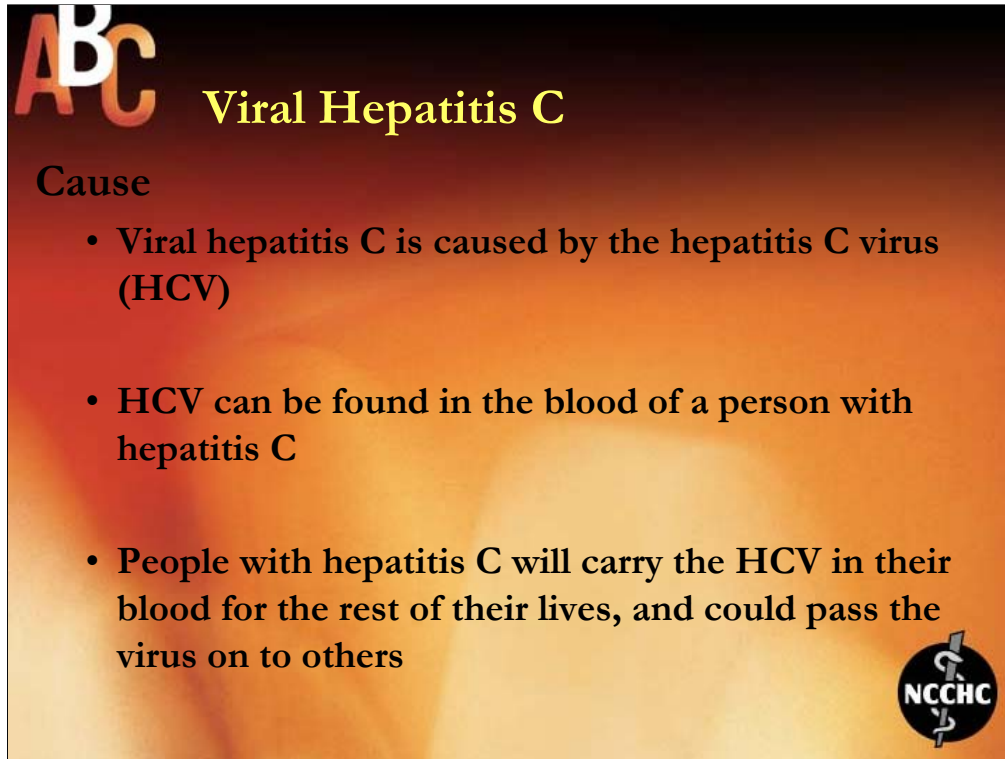
By immunizing everyone when they are young, we are protecting them from getting the disease later.

The institution's policies regarding Hepatitis B vaccine for inmates are:

Insert the institution's policy Hepatitis B vaccinations for inmates.

Answer questions relating to the facility's policy.

Spend no more than three minutes on this discussion.

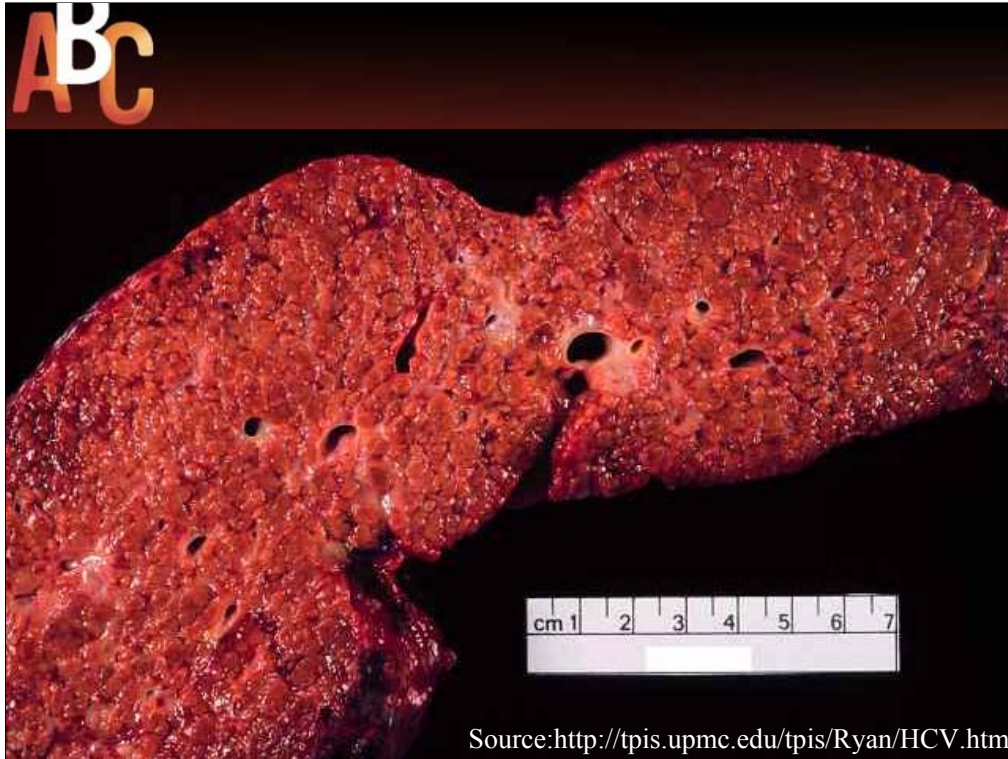


0:40 Viral Hepatitis C

Viral hepatitis C is a serious infection of the liver caused by the hepatitis C virus (HCV) .

It is believed that most people who catch hepatitis C will go on to carry the virus in their blood and could pass the virus on to others.

Most people who get the hepatitis C virus may have no visible signs for up to 20 to 30 years after becoming infected.



This is a photo of a hepatitis C infected liver. Notice the **extensive** damage to the tissue.

[Photo courtesy of Anthony Demetris, MD, University of Pittsburgh Medical Center, Pittsburgh, PA]



Viral Hepatitis C

Prevalence

- An estimated 3.9 million Americans have been infected with HCV, of whom 2.7 million are chronically infected
- Most infections are due to illegal injection and drug use
- Significantly higher for inmates versus the US population (10x higher)



The number of new infections a year has declined from an average of 240,000 in the 1980s to about 40,000 in 1998.

There are approximately 4 million Americans infected with the HCV.

Most cases of hepatitis C occur through high-risk drug behaviors such as “shooting drugs.”

The Take Home Message: 60% of people get the hepatitis C virus by shooting drugs.

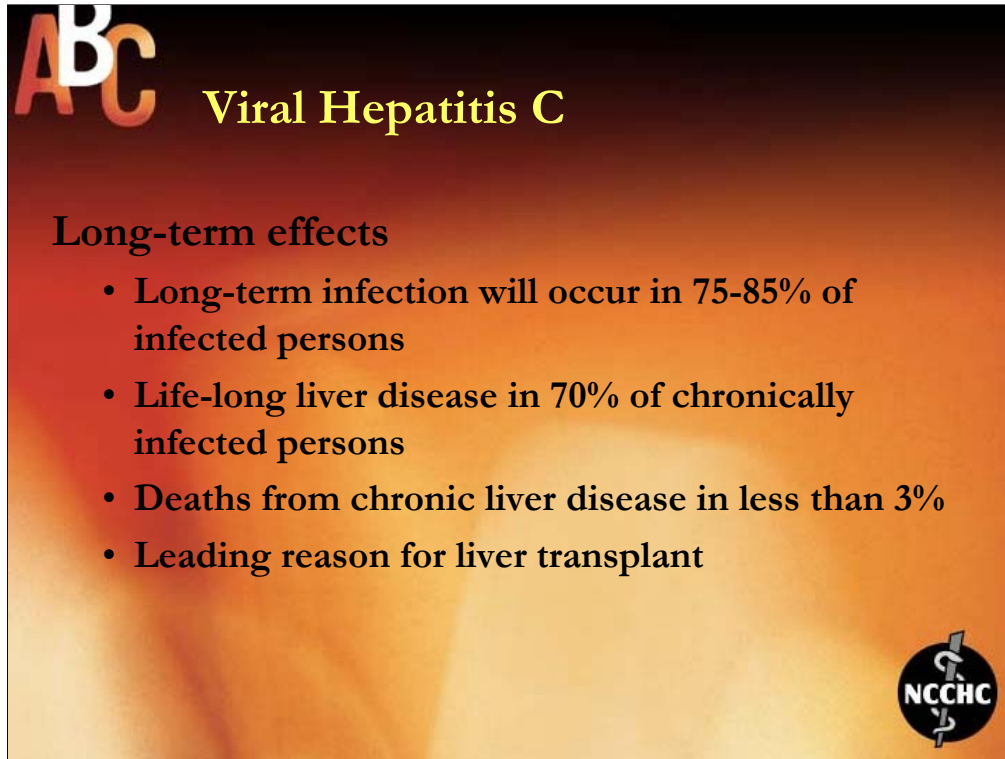
Only 20% of HCV positive people get it from sexual transmission (a very inefficient way of transmission) .



Since 1992, all donated blood in the U.S. has been tested to detect blood infected with hepatitis C virus.

People who get hepatitis C through blood transfusions are now very rare (less than 1 HCV infection per one million units transfused).

Because hepatitis C is spread through high-risk drug behavior, inmates are 10 times as likely to have hepatitis C than the U.S. population.



0:45 Long-term Effects of Hepatitis C Virus

Chronic infection occurs in 75-85% of infected persons.

Chronic liver disease will occur in 70% of chronically infected persons.

- A little less than 3% of individuals with chronic hepatitis C die from chronic liver disease.

Hepatitis C is the leading **indication** for liver transplant.



Prevention of Hepatitis C

Prevention

- No vaccine

Best prevention is behavior change

- Do not shoot drugs
- Do not share personal items such as razors or toothbrushes
- Avoid tattoo or body piercing



There is no vaccine to prevent hepatitis C.

The best prevention is behavioral change:

- Do not shoot drugs.
- Never share needles, syringes, water, or "works."
- Do not share personal care items that might have blood on them (razors, toothbrushes).
- Avoid tattoo or body piercing. (You might get infected if the tools have someone else's blood on them or if the artist or piercer does not follow good health practices.)

0:50 Other preventive measures

Get vaccinated against hepatitis A & B.

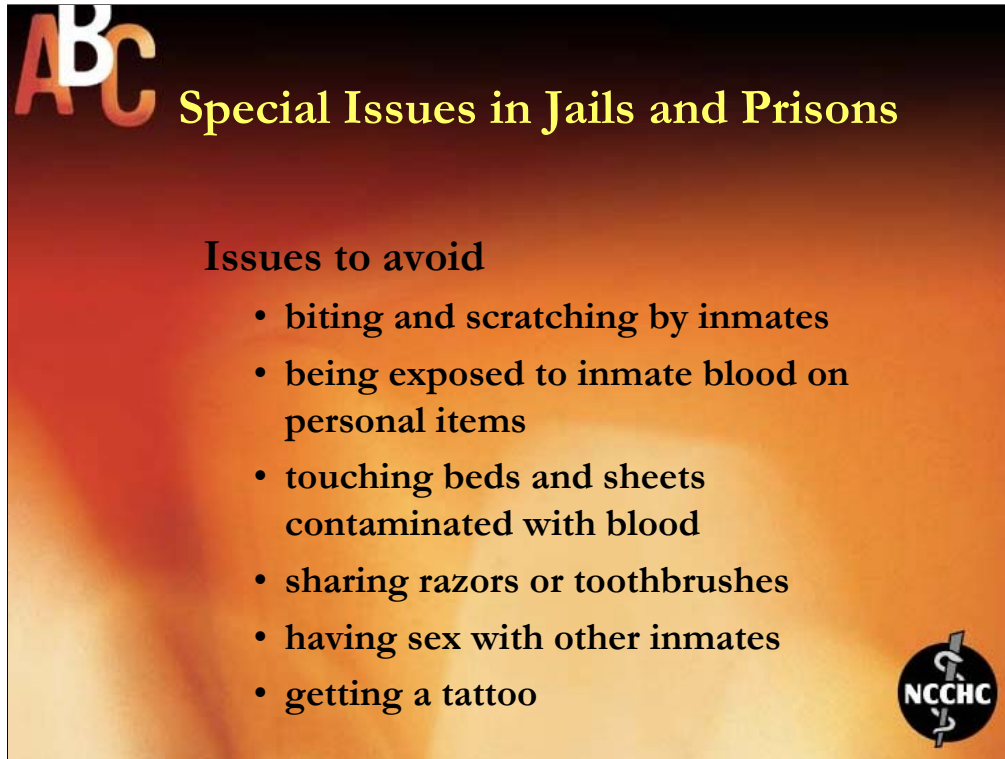
HCV can be spread by sex, but this is rare. If you are having sex with more than one steady sex partner, use condoms correctly and every time to prevent the spread of sexually transmitted diseases.

The **efficacy** (safety and effectiveness) of **latex** condoms in **preventing** infection with HBV is unknown, but their **proper** use may **reduce transmission**.

HCV positive individuals should not donate blood, organs, or tissue.

This concludes Section I on hepatitis. Ask the audience if there are any questions regarding the three types of hepatitis that were discussed. Spend no more than 5 minutes in this discussion.

Next, I will discuss the special considerations that you must take to protect yourself while in (jail)(prison).



1:00 Special Issues in Jails and Prisons

I will next discuss the potential risks for people who are incarcerated.

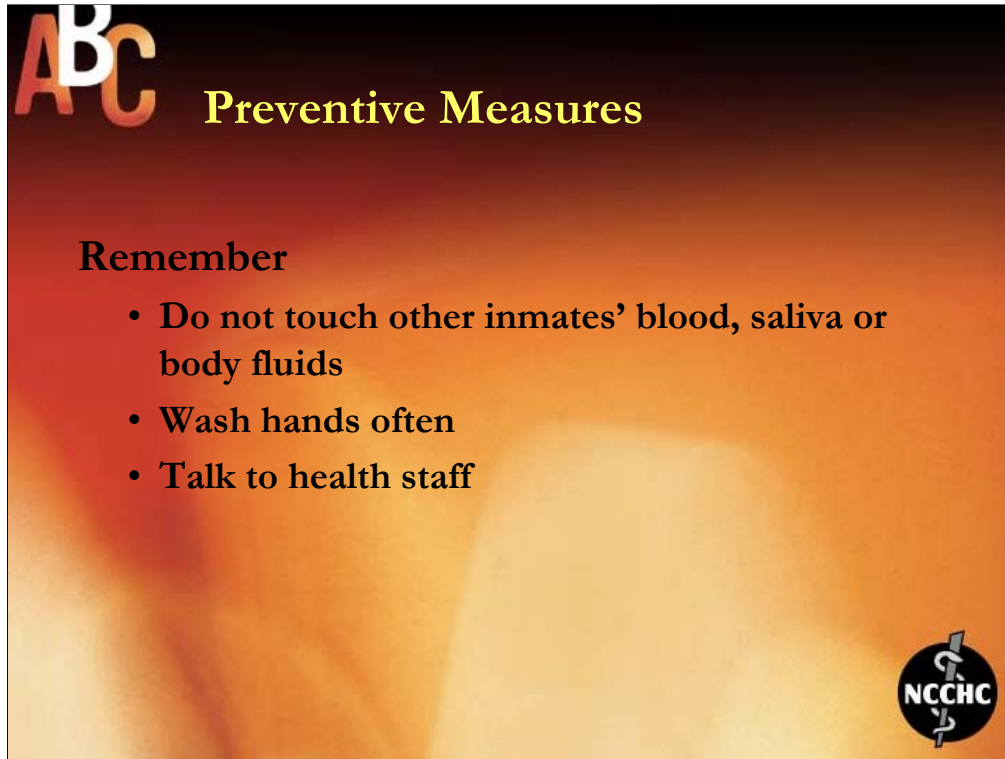
I also will discuss some preventive measures that you can take and how to protect your family from hepatitis transmission.

Anything that exposes you to the blood of other inmates is a potential risk:

- Biting and scratching by inmates
- Fights between inmates
- Exposure to inmate blood on personal items like razors and toothbrushes
- Touching clothing, beds and sheets contaminated with blood or feces.

Although these are risks that anyone can have in contacting any of the hepatitis viruses, you can take measures to protect yourself by

- NOT biting and scratching other inmates
- NOT being exposed to inmate blood on personal items like razors or toothbrushes
- DO NOT touch beds and sheets contaminated with blood
- DO NOT have sex with other inmates
- DO NOT get a tattoo while in the (jail) (prison)



1:07 Preventive Measures

If you are a trusty or have a job in the institution that requires you to clean up inmate blood, saliva or other body fluids containing blood, wear gloves and take **appropriate** action.

Sanitize everything that other inmates could contaminate with blood (for example bathroom sinks and toilets).

Take precautions such as hand-washing.

Keep open communications with facility health staff.

Get a viral hepatitis B vaccination if the facility allows it.

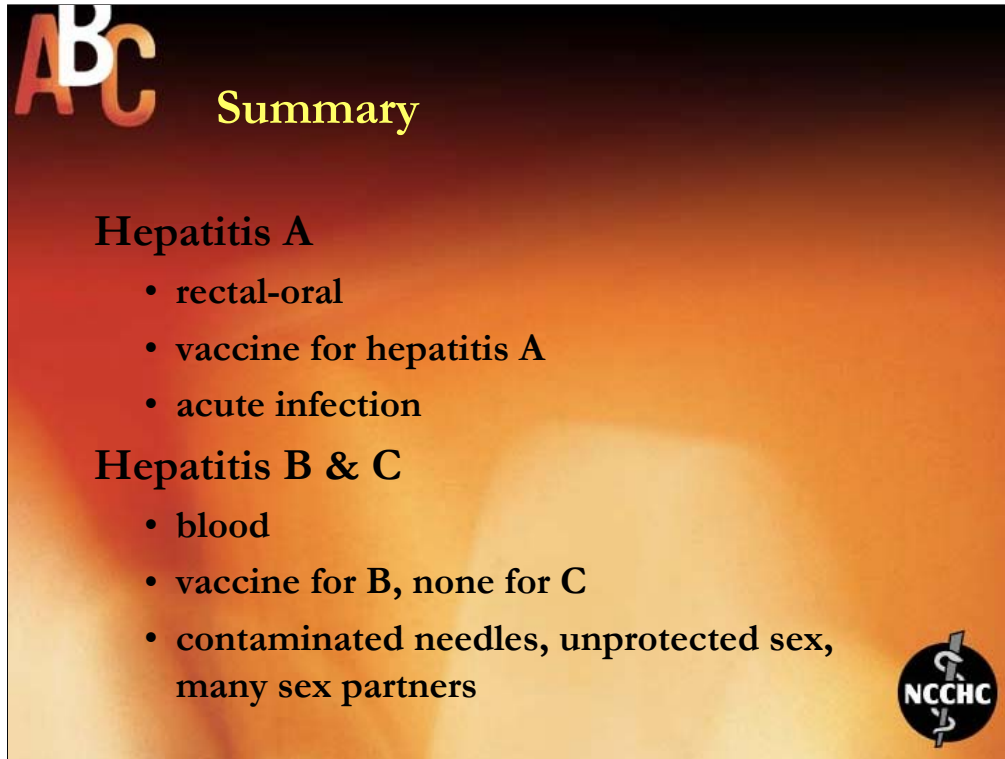


1:12 Job-Related Exposures

If you should become exposed to blood or other bodily fluids while in this facility, you should:

Insert institutional policies here.

Spend no more than 5 minutes discussing institutional policies relating to bloodborne pathogen exposure for inmates.



1:17 Summary

Review important key points that the inmates expressed interest in. Review:

Hepatitis A

rectal-oral, contaminated food/water
vaccine for hepatitis A
acute infection

Hepatitis B & C

blood exposure
vaccine for B, none for C
contaminated needles, unprotected sex, many sex partners



1:25 Question and Answer Period

Answer any questions that arise.

Closing Commentary

Take a minute to make a closing comment that reinforces prevention and behavior change.

Next, administer the post-test.

[Note: In an effort to continually improve this curriculum, your comments and suggestions are solicited. Please write to the National Commission or email us at ncchc@ncchc.org.]